General

Guideline Title

Evidence-based clinical practice guideline for the use of pit-and-fissure sealants: a report of the American Dental Association and the American Academy of Pediatric Dentistry.

Bibliographic Source(s)

Wright JT, Crall JJ, Fontana M, Gillette EJ, NovÃ½ BB, Dhar V, Donly K, Hewlett ER, Quinonez RB, Chaffin J, Crespin M, Iafolla T, Siegal MD, Tampi MP, Graham L, Estrich C, Carrasco-Labra A. Evidence-based clinical practice guideline for the use of pit-and-fissure sealants: a report of the American Dental Association and the American Academy of Pediatric Dentistry. J Am Dent Assoc. 2016 Aug;147(8):672-82.e12. [57 references] PubMed

Guideline Status

This is the current release of the guideline.

This guideline updates a previous version: Beauchamp J, Caufield PW, Crall JJ, Donly K, Feigal R, Gooch B, Ismail A, Kohn W, Siegal M, Simonsen R, American Dental Association Council on Scientific Affairs. Evidence-based clinical recommendations for the use of pit-and-fissure sealants: a report of the American Dental Association Council on Scientific Affairs. J Am Dent Assoc. 2008 Mar;139(3):257-68.

This guideline meets NGC's 2013 (revised) inclusion criteria.

Recommendations

Major Recommendations

Definitions for the quality of the evidence (High, Moderate, Low, Very Low) and the strength of recommendations (Strong, Conditional) are provided at the end of the "Major Recommendations" field.

Summary of Clinical Recommendations on the Use of Pit-and-Fissure Sealants in the Occlusal Surfaces of Primary and Permanent Molars in Children and Adolescents			
Question	**Recommendation**	**Quality of the Evidence**	**Strength of Recommendation**
Should dental sealants, when compared with nonuse of sealants, be used in pits and fissures of occlusal surfaces of primary and permanent	The sealant guideline panel recommends the use of sealants compared with nonuse in permanent molars with both sound occlusal surfaces and noncavitated occlusal carious lesions in children and adolescents*	Moderate	Strong

Summary of Clinical Recommendations on the Use of Pit-and-Fissure Sealants in the Occlusal Surfaces of Primary and Permanent Molars in Children and Adolescents			
Question	**Recommendation**	**Quality of the Evidence**	**Strength of Recommendation**
Should dental sealants, when compared with fluoride varnishes, be used in pits and fissures of occlusal surfaces of primary and permanent molars on teeth deemed to have clinically sound occlusal surfaces or noncavitated carious lesions?	The sealant guideline panel suggests the use of sealants compared with fluoride varnishes in permanent molars with both sound occlusal surfaces and noncavitated occlusal carious lesions in children and adolescents*	Low	Conditional
Which type of sealant material should be used in pits and fissures of occlusal surfaces of primary and permanent molars on teeth deemed to have clinically sound occlusal surfaces or noncavitated carious lesions?	The panel was unable to determine superiority of 1 type of sealant over another owing to the very low quality of evidence for comparative studies; the panel recommends that any of the materials evaluated (for example, resin-based sealants, resin-modified glass ionomer sealants, glass ionomer cements, and polyacid-modified resin sealants, in no particular order) can be used for application in permanent molars with both sound occlusal surfaces and noncavitated occlusal carious lesions in children and adolescents (conditional recommendation, very low–quality evidence)*†	Very low	Conditional

*These recommendations are applicable to both sound surfaces and noncavitated carious lesions: "Noncavitated lesions are characterized by a change in color, glossiness, or surface structure as a result of demineralization before there is macroscopic breakdown in surface tooth structure. These lesions represent areas with net mineral loss due to an imbalance between demineralization and remineralization. Reestablishing a balance between demineralization and remineralization may stop the caries disease process while leaving a visible clinical sign of past disease."

†The guideline panel suggests that clinicians should take into account the likelihood of experiencing lack of retention when choosing the type of sealant material most appropriate for a specific patient and clinical scenario. For example, in situations in which dry isolation is difficult, such as a tooth that is not fully erupted and has soft tissue impinging on the area to be sealed, then a material that is more hydrophilic (for example, glass ionomer) would be preferable to a hydrophobic resin-based sealant. On the other hand, if the tooth can be isolated to ensure a dry site and long-term retention is desired, then a resin-based sealant may be preferable.

Definitions

Evidence Quality and Certainty Definitions

Category	Definition
High	The panel is very confident that the true effect lies close to that of the estimate of the effect
Moderate	The panel is moderately confident in the effect estimate; the true effect is likely to be close to the estimate of the effect, but there is a possibility that it is substantially different
Low	Confidence in the effect estimate is limited; the true effect may be substantially different from the estimate of the effect
Very Low	The panel has very little confidence in the effect estimate; the true effect is likely to be substantially different from the estimate of effect

Reproduced with permission from Balshem H, Helfand M, Schunemänn HJ, et al. GRADE guidelines: the quality of evidence. J Clin Epidemiol. 2011;64(4):401-406.

Definition of Strong and Conditional Recommendations and Implications for Stakeholders

Implications	Strong Recommendations	Conditional Recommendations
For Patients	Most people in this situation would want the recommended course of action, and only a small proportion would not; formal decision aids are not likely to be needed to help people make decisions consistent with their values and preferences	Most people in this situation would want the suggested course of action, but many would not
For Clinicians	Most people should receive the intervention; adherence to this recommendation according to the guideline could be used as a quality criterion or performance indicator	Recognize that different choices will be appropriate for individual patients and that you must help each patient arrive at a management decision consistent with his or her values and preferences; decision aids may be useful in helping people to make decisions consistent

Implications	Strong Recommendations	Conditional Recommendations
For Policy Makers	The recommendation can be adapted as policy in most situations	Policy making will require substantial debate and involvement of various stakeholders

Sources: Andrews J, Guyatt G, Oxman AD, et al. GRADE guidelines: 14. Going from evidence to recommendations—the significance and presentation of recommendations. J Clin Epidemiol. 2013;66(7):719-725; Andrews JC, Schunemann HJ, Oxman AD, et al. GRADE guidelines: 15. Going from evidence to recommendation—determinants of a recommendation's direction and strength. J Clin Epidemiol. 2013;66(7):726-735.

Clinical Algorithm(s)

None provided

Scope

Disease/Condition(s)

Dental caries

Guideline Category

Prevention

Clinical Specialty

Dentistry

Intended Users

Allied Health Personnel

Dentists

Public Health Departments

Guideline Objective(s)

To provide clinicians with updated evidence-based recommendations regarding when and how the placement of pit-and-fissure sealants is most likely to be effective in preventing carious lesions on the occlusal surfaces of primary and permanent teeth in children and adolescents

Target Population

Children and adolescents

Interventions and Practices Considered

Use of pit-and-fissure sealants

Major Outcomes Considered

- Incidence of dental caries
- Lack of retention
- Adverse effects

Methodology

Methods Used to Collect/Select the Evidence

Hand-searches of Published Literature (Secondary Sources)

Searches of Electronic Databases

Searches of Unpublished Data

Description of Methods Used to Collect/Select the Evidence

The systematic review (see the "Availability of Companion Documents" field) report follows the guidance of the Preferred Reporting Items for Systematic Reviews and Meta-Analyses statement.

Selection Criteria for the Studies in the Review

Type of Studies

The reviewers included parallel and split-mouth randomized controlled trials (RCTs) with at least 2 years of follow-up. They excluded quasi-randomized trials, nonrandomized trials, and observational studies.

Type of Participants

The reviewers included studies that involved children, adolescents, and adults from the general population who did or did not have a history of carious lesions and who had either a sound occlusal surface or a noncavitated carious lesion in primary and permanent molars.

Type of Interventions

For the systematic review, the reviewers defined 4 categories of sealant materials: resin-based sealants, glass ionomer (GI) cements or GI sealants, resin-modified GI sealants, and polyacid-modified resins. They classified resin-modified GI sealants as a subcategory of the GI sealants category and polyacid-modified resins as a subcategory of the resin-based sealants category. They defined "intervention" as any of the 4 types of sealant materials described previously, irrespective of the application technique. They excluded studies whose investigators used sealant materials that were not commercially available at the time of this review. They defined "comparison" as any type of sealant material irrespective of the application technique, the nonplacement of sealants, or the use of fluoride varnishes.

Type of Outcome Measures

The reviewers defined "caries incidence" as the identification of a new carious lesion on the occlusal surface of a primary or permanent molar that compromised dentin tissue. They defined "lack of retention" as the complete detachment or retention loss of the sealant material from the grooves and pits in the occlusal surface of a tooth with no macroscopically visible sealant material. They defined "adverse effects" as any potential adverse effect defined by the authors of the primary studies. For all outcomes, they grouped the studies into 3 categories according to the length of follow-up: 2 to 3 years, 4 to 7 years, and 7 or more years.

Search Methods for the Identification of Studies

Electronic Databases

The reviewers searched MEDLINE (via PubMed), EMBASE, LILACS, and the Cochrane Central Register of Controlled Trials (CENTRAL) from January 1971 to May 2013. They searched MEDLINE (via PubMed) and the Cochrane Central Register of Controlled Trials (CENTRAL) from June 2013 to May 2016. They used a combination of key words and controlled vocabulary that they adapted for each electronic database. They used filters, such as the Cochrane Highly Sensitive Search Strategy, for identifying randomized trials (see the Appendix to the systematic review).

Other Type of Resources

The reviewers searched ClinicalTrials.gov to identify completed or ongoing RCTs that were not yet published and indexed in the regular electronic indices. They also screened the reference lists of included studies from previous systematic reviews to ensure that they had not omitted relevant studies. They did not exclude any studies on the basis of the status or language of publication.

Data Collection

Selection of Studies

In the first stage, 2 reviewers independently screened the titles and abstracts of all retrieved references by using a standardized form. Because they used an inclusive criterion, when the reviewers disagreed on the eligibility status for a particular reference, they included the citation in question at this stage and resolved the disagreement at the full-text screening stage. In the second stage, 2 reviewers independently screened the full text of all potentially eligible studies. They resolved any disagreement by means of discussion. When consensus was elusive, a third reviewer, acting as an arbiter, decided final eligibility.

Number of Source Documents

The search process resulted in 2,869 references, which the reviewers screened to assess their titles and abstracts; they excluded 2,419 references at that stage of the search process. Next, they excluded 426 articles, which they had assessed by means of full-text screenings, and they included 24 articles, which represented 23 studies, in this review.

Methods Used to Assess the Quality and Strength of the Evidence

Weighting According to a Rating Scheme (Scheme Given)

Rating Scheme for the Strength of the Evidence

Evidence Quality and Certainty Definitions

Category	Definition
High	The panel is very confident that the true effect lies close to that of the estimate of the effect
Moderate	The panel is moderately confident in the effect estimate; the true effect is likely to be close to the estimate of the effect, but there is a possibility that it is substantially different
Low	Confidence in the effect estimate is limited; the true effect may be substantially different from the estimate of the effect
Very Low	The panel has very little confidence in the effect estimate; the true effect is likely to be substantially different from the estimate of effect
Reproduced with permission from Balshem H, Helfand M, Schunemänn HJ, et al. GRADE guidelines: rating the quality of evidence. J Clin Epidemiol. 2011;64(4):401-406.	

Methods Used to Analyze the Evidence

Meta-Analysis of Randomized Controlled Trials

Review of Published Meta-Analyses

Systematic Review with Evidence Tables

Description of the Methods Used to Analyze the Evidence

Data Analysis

Data Extraction and Management

Using a standardized form, 2 reviewers independently extracted data from all the included studies. The form included instructions to extract the main characteristics of the studies, including the type of study design (parallel, split-mouth), population (age, sex, selection criteria, caries history, clinical diagnosis of the occlusal surface to be sealed), type of sealant material and the comparison (nonuse of sealant or an active comparator), and the outcomes (specific definition from the primary study and results). When these reviewers identified discrepancies that they were unable to clarify, a third reviewer acted as arbiter.

Assessment of the Risk of Bias of Included Studies

Two reviewers independently conducted an assessment of the risk of bias for each included study by using the Cochrane risk of bias tool. The reviewers assessed the following types of bias in each study: selection bias (Was allocation randomized and concealed to ensure comparability between groups?), detection bias (Were the patients and outcome assessors unaware of which treatment was applied?), attrition bias (Were dropout rates sufficiently low to ensure that groups were still comparable at follow-up?), reporting bias (Did investigators selectively report outcomes?), and other sources of bias. For each domain, they determined whether a study had a high, low, or unclear risk of bias. The reviewers considered randomization sequence generation and allocation concealment to be the most important domains for the overall assessment of risk of bias. They resolved any disagreements by means of discussion until they reached consensus.

Measures of Treatment Effect and Missing Data

The reviewers analyzed caries incidence, lack of retention, and adverse events as dichotomous outcomes. For studies in which the investigators reported sealants as being fully retained, partially retained, and not retained, they grouped the fully and partially retained events and compared them with the sealants that were not retained to create the estimate. They calculated odds ratios (OR) and 95% confidence intervals (CI) for both outcomes. For each study, they calculated the proportion of missing participant data, and they determined to what extent the amount of missing data was substantial enough to change the magnitude and direction of the estimates to the point of dramatically changing the conclusions, as suggested by Akl and colleagues. Otherwise, the reviewers used complete case analysis.

Assessment of Heterogeneity

The reviewers conducted the assessment of heterogeneity by following the guidance of the *Cochrane Handbook for Systematic Reviews of Intervention*. They used the χ^2 test to determine the presence of statistical heterogeneity, and they set the level of significance at .1. In addition, they quantified the amount of heterogeneity among studies using the I^2 statistic, in which they considered a value of I^2 40% or less to be unimportant heterogeneity, a value of I^2 from 30% through 60% to be moderate heterogeneity, a value of I^2 from 50% through 90% to be substantial heterogeneity, and a value of I^2 from 70% through 100% to be considerable heterogeneity.

Assessment of Publication Bias

The reviewers conducted the assessment of publication bias by following the recommendations from the *Cochrane Handbook for Systematic Reviews of Intervention*. If they noted that an outcome was informed by more than 10 studies, then they explored publication bias by using funnel plots.

Data Synthesis

Investigators of randomized controlled trials (RCTs) who measured the effectiveness of interventions to prevent carious lesions typically used 1 of 2 designs: split-mouth or parallel. In RCTs whose investigators used a parallel design, the investigators allocated study participants to receive either the experimental treatment or a control. In split-mouth trials, the investigators randomly assigned 1 of 2 treatments (for example, sealant versus no sealant) to the same type of tooth on the right and left sides of the participant's mouth. One advantage of conducting split-mouth trials is that these types of RCTs minimize variability among study participants, as the intervention and control teeth are in the same person's mouth. One potential issue, however, is that the preventive benefits of the intervention may carry over to the control teeth. The reviewers judged these carryover effects to be minimal for sealants, and therefore, they pooled the findings from studies whose investigators had used each of these designs to create a single effect estimate by using the methodology proposed by Lesaffre and colleagues and Elbourne and colleagues. The reviewers used Review Manager (RevMan), Version 5.3 (Cochrane Collaboration) to conduct the analysis. To obtain the pooled estimate, they used the generic inverse-variance method with a random-effects model. When they included fewer than 4 studies in the meta-analysis, they used a fixed-effects model.

Subgroup Analysis

The reviewers conducted subgroup analysis to determine whether the studies whose investigators had enrolled participants with noncavitated pit-and-fissure occlusal carious lesions, sound occlusal surfaces, and those who had both (that is, a population who had a mix of both sound occlusal surfaces and noncavitated carious lesions) had different treatment effects. For the interaction test, they used a level of significance of .05.

Assessment of the Quality of the Evidence

The reviewers determined the quality of the evidence (certainty in the estimates of effect) for each outcome by using the Grading of Recommendations Assessment, Development and Evaluation (GRADE) approach. With the GRADE approach, RCTs start as high-quality evidence; however, the quality or certainty in the body of evidence decreases to moderate-, low-, or very low–quality evidence if serious or very serious issues related to risk of bias, imprecision, inconsistency, indirectness, and publication bias are present (see Table 1 in the systematic review [see the "Availability of Companion Documents" field). Two reviewers independently conducted these evaluations.

Methods Used to Formulate the Recommendations

Expert Consensus

Description of Methods Used to Formulate the Recommendations

This clinical practice guideline follows the recommendations of the Appraisal of Guidelines Research & Evaluation (known as "AGREE") reporting checklist.

Guideline Panel Configuration

The American Dental Association (ADA) Council on Scientific Affairs and the American Academy of Pediatric Dentistry (AAPD) convened a guideline panel in 2014. The members of this panel were recognized for their level of clinical and research expertise and represented the different perspectives required for clinical decision making (general dentists, pediatric dentists, dental hygienists, and health policy makers). Methodologists from the ADA Center for Evidence-Based Dentistry oversaw the guideline development process.

Moving from the Evidence to the Decisions

To assist the guideline panel with formulating recommendations and grading the strength of the recommendations, they used the evidence-to-decision framework, including the following domains: balance between the desirable and undesirable consequences (net effect), certainty in the evidence (also called quality of the evidence), patients' values and preferences, and resource use. According to the Grading of Recommendations Assessment, Development and Evaluation (GRADE) approach, the strength of a recommendation is either strong or conditional, in which each grade of the strength has different implications for patients, clinicians, and policy makers (see the "Rating Scheme for the Strength of the Recommendations" field).

The guideline recommendations were formulated collectively via 3 videoconferences with members of the guideline panel and methodologists from the ADA Center for Evidence-Based Dentistry and the AAPD held in January 2016. Deliberation and consensus were the main methods to develop these recommendations using the "evidence-to-decision" framework. When consensus was elusive, the panel was presented with the positions under assessment, and it voted accordingly.

Rating Scheme for the Strength of the Recommendations

Definition of Strong and Conditional Recommendations and Implications for Stakeholders*

Implications	Strong Recommendations	Conditional Recommendations
For Patients	Most people in this situation would want the recommended course of action, and only a small proportion would not; formal decision aids are not likely to be needed to help people make decisions consistent with their values and preferences	Most people in this situation would want the suggested course of action, but many would not
For Clinicians	Most people should receive the intervention; adherence to this recommendation according to the guideline could be used as a quality criterion or performance indicator	Recognize that different choices will be appropriate for individual patients and that you must help each patient arrive at a management decision consistent with his or her values and preferences; decision aids may be useful in helping people to make decisions consistent with their values and preferences
For Policy Makers	The recommendation can be adapted as policy in most situations	Policy making will require substantial debate and involvement of various stakeholders

Implications	Strong Recommendations	Conditional Recommendations

Sources: Andrews J, Guyatt G, Oxman AD, et al. GRADE guidelines: 14. Going from evidence to recommendations—the significance and presentation of recommendations. J Clin Epidemiol. 2013;66(7):719-725; Andrews JC, Schunemann HJ, Oxman AD, et al. GRADE guidelines: 15. Going from evidence to recommendation—determinants of a recommendation's direction and strength. J Clin Epidemiol. 2013;66(7):726-735.

Cost Analysis

The panel highlighted that a number of studies have shown that sealing children's and adolescents' permanent molars reduces costs to the health system by delaying and preventing the need for invasive restorative treatment, particularly when these patients are classified as having an "elevated caries risk" (that is, previous caries experience). Under these conditions, dental sealants seem to be a cost-effective intervention.

Method of Guideline Validation

Not stated

Description of Method of Guideline Validation

Not applicable

Evidence Supporting the Recommendations

Type of Evidence Supporting the Recommendations

The recommendations are supported by parallel and split-mouth randomized controlled trials (RCTs).

Benefits/Harms of Implementing the Guideline Recommendations

Potential Benefits

- The panel highlighted that a number of studies have shown that sealing children's and adolescents' permanent molars reduces costs to the health system by delaying and preventing the need for invasive restorative treatment, particularly when these patients are classified as having an "elevated caries risk" (that is, previous caries experience).
- The evidence shows that sealants available in the United States (U.S.) market at the time of the systematic review are an effective intervention for reducing the incidence of carious lesions in the occlusal surfaces of primary and permanent molars in children and adolescents compared with the nonuse of sealants or fluoride varnishes. This benefit is inclusive to both sound occlusal surfaces and noncavitated occlusal carious lesions.

Potential Harms

There has been concern that dental sealants might exhibit adverse effects. This is primarily associated with bisphenol A (BPA). It has been suggested that the BPA present in some sealants may have estrogen-like effects; however, the evidence does not support the transient effect of a small amount of BPA in placing patients at risk. Studies also have evaluated the correlation of developing carious lesions in teeth with fully or partially lost sealants and found no greater risk than in teeth that had never been sealed. Two randomized controlled trials measuring the occurrence of adverse effects associated with sealants found no events related to this outcome.

Qualifying Statements

Qualifying Statements

Qualifying Statements

Clinicians should use these recommendations but consider carefully individual patient factors, especially where the guideline panel offered conditional recommendations. In addition, sealant use should be increased along with other preventive interventions to manage the caries disease process, especially in patients with an elevated risk of developing caries. Further research is needed to provide more risk-oriented recommendations, particularly regarding the development of a valid and reliable chairside tool for clinicians to assess a patient's caries risk.

Implementation of the Guideline

Description of Implementation Strategy

An implementation strategy was not provided.

Implementation Tools

Quick Reference Guides/Physician Guides

Resources

For information about availability, see the *Availability of Companion Documents* and *Patient Resources* fields below.

Institute of Medicine (IOM) National Healthcare Quality Report Categories

IOM Care Need

Staying Healthy

IOM Domain

Effectiveness

Patient-centeredness

Identifying Information and Availability

Bibliographic Source(s)

Wright JT, Crall JJ, Fontana M, Gillette EJ, NovÃ½ BB, Dhar V, Donly K, Hewlett ER, Quinonez RB, Chaffin J, Crespin M, Iafolla T, Siegal MD, Tampi MP, Graham L, Estrich C, Carrasco-Labra A. Evidence-based clinical practice guideline for the use of pit-and-fissure sealants: a report of the American Dental Association and the American Academy of Pediatric Dentistry. J Am Dent Assoc. 2016 Aug;147(8):672-82.e12. [57 references] PubMed

Adaptation

Not applicable: The guideline was not adapted from another source.

Date Released

2016 Aug

Guideline Developer(s)

American Academy of Pediatric Dentistry - Professional Association

American Dental Association - Professional Association

Source(s) of Funding

The American Dental Association Council on Scientific Affairs commissioned this work and the American Academy of Pediatric Dentistry partly funded this project.

Guideline Committee

American Dental Association Council on Scientific Affairs Expert Panel

Composition of Group That Authored the Guideline

Panel Members: John T. Wright, DDS, MS; James J. Crall, DDS, MS, ScD; Margherita Fontana, DDS, PhD; E. Jane Gillette, DDS; Brian B. Nový, DDS; Vineet Dhar, BDS, MDS, PhD; Kevin Donly, DDS, MS; Edmond R. Hewlett, DDS; Rocio B. Quinonez, DMD, MS, MPH; Jeffrey Chaffin, DDS, MPH, MBA, MHA; Matt Crespin, MPH, RDH; Timothy Iafolla, DMD, MPH; Mark D. Siegal, DDS, MPH; Malavika P. Tampi, MPH; Laurel Graham, MLS; Cameron Estrich, MPH; Alonso Carrasco-Labra, DDS, MSc, PhD(c)

Financial Disclosures/Conflicts of Interest

The guideline developers identified potential conflicts of interest and managed them according to the recommendations from the World Health Organization and other guideline development agencies.

Disclosure

Dr. Fontana is a consultant for the American Dental Association Council on Scientific Affairs. In the past, she has received funds from the National Institute of Dental and Craniofacial Research, Delta Dental, and Ivoclar Vivodent to conduct research focused on dental students. These grants ended before her engagement with the work involved in this manuscript. Dr. Nový's previous continuing education lecture honoraria were provided by the following manufacturers of sealant materials: GC America, SDI, and Shofu, and his previous continuing education lecture honoraria were provided by the following dental manufacturers: Air Techniques, CariFree, GlaxoSmithKline, Ivoclar, Phillips, Solutionreach, Triodent, and Xlear. Mr. Crespin is the chair of the Children's Dental Health Project's sealant work group and has received funding from Children's Dental Health Project, Delta Dental of Wisconsin, Washington Dental Services Foundation, DentaQuest Foundation, Health Resource and Services Administration Maternal and Child Health Bureau, and the Healthier Wisconsin Partnership Program. Mr. Crespin serves on the board of trustees of the American Dental Hygienists' Association. None of the other authors reported any disclosures.

Guideline Status

This is the current release of the guideline.

This guideline updates a previous version: Beauchamp J, Caufield PW, Crall JJ, Donly K, Feigal R, Gooch B, Ismail A, Kohn W, Siegal M, Simonsen R, American Dental Association Council on Scientific Affairs. Evidence-based clinical recommendations for the use of pit-and-fissure sealants: a report of the American Dental Association Council on Scientific Affairs. J Am Dent Assoc. 2008 Mar;139(3):257-68.

This guideline meets NGC's 2013 (revised) inclusion criteria.

Guideline Availability

Available from the Journal of the American Dental Association Web site.

Availability of Companion Documents

The following are available:

- Wright JT, Tampi MP, Graham L, Estrich C, Crall JJ, Fontana M, Gillette EJ, Nový BB, Dhar V, Donly K, Hewlett ER, Quinonez RB, Chaffin J, Crespin M, Iafolla T, Siegal MD, Carrasco-Labra A. Sealants for preventing and arresting pit-and-fissure occlusal caries in primary and permanent molars. A systematic review of randomized controlled trials—a report of the American Dental Association and the American Academy of Pediatric Dentistry. J Am Dent Assoc. 2016 Aug:147(8):631-45. Available from the Journal of the American Dental Association Web site.
- Evidence-based clinical practice guideline for the use of pit-and-fissure sealants: a report of the American Dental Association and the American Academy of Pediatric Dentistry. Chairside guide. Chicago (IL): American Dental Association; 2016. 2 p. Available from the American Dental Association (ADA) Center for Evidence-based Dentistry (EBD) Web site.
- Oral health topics: dental sealants. Chicago (IL): American Dental Association; 2016 Aug 10. Available from the ADA Web site.
- ADA clinical practice guidelines handbook: 2013 update. Chicago (IL): American Dental Association; 2013 Nov. 58 p. Available from the ADA Center for EBD Web site.

Patient Resources

None available

NGC Status

This NGC summary was completed by ECRI Institute on October 13, 2008. The information was verified by the guideline developer on October 28, 2008. This summary was updated by ECRI Institute on November 30, 2016. The updated information was not verified by the guideline developer.

Copyright Statement

Disclaimer

NGC Disclaimer

The National Guideline Clearinghouseâ„¢ (NGC) does not develop, produce, approve, or endorse the guidelines represented on this site.

All guidelines summarized by NGC and hosted on our site are produced under the auspices of medical specialty societies, relevant professional associations, public or private organizations, other government agencies, health care organizations or plans, and similar entities.

Guidelines represented on the NGC Web site are submitted by guideline developers, and are screened solely to determine that they meet the NGC

Inclusion Criteria.

NGC, AHRQ, and its contractor ECRI Institute make no warranties concerning the content or clinical efficacy or effectiveness of the clinical practice guidelines and related materials represented on this site. Moreover, the views and opinions of developers or authors of guidelines represented on this site do not necessarily state or reflect those of NGC, AHRQ, or its contractor ECRI Institute, and inclusion or hosting of guidelines in NGC may not be used for advertising or commercial endorsement purposes.

Readers with questions regarding guideline content are directed to contact the guideline developer.